

REMARKS/ARGUMENTS

Status of the Claims

Claims 1-3, 5-10, and 12-16 remain in the application;

Claims 4 and 11 have been canceled;

Claims 1, 5, 6, 10, and 12 have been amended;

Claim objections

Claims 1 and 10 have been objected to because an antecedent basis for "the controller" is absent therefrom.

In response to the objection, "controller" has been deleted from the claims and replaced with "control system".

Claim rejections under 35 U.S.C. § 103(a)

Claims 1-16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,130,980 (Fardal) in view of U.S. Patent No. 5,515,233 (Hofmann), with the Examiner taking the position that:

Fardal discloses a control system (figures 1-3) for use with a grain harvester (generally 10) having various transducers (column 2, lines 54-58) and sensors 23 for detecting the passage of grain as well as a comparator circuit 78 to compare the sensed information in contrast to predetermined values. Further, Fardal discloses varying operating perimeters [sic] (column 2, lines 9-54) based on these sensed conditions with ground speed (Abstract) being one of the varied perimeters [sic] but fails to show the use of relays. However, Hofmann teaches that it is well known to employ relays 21 in concert with sensed control systems (figure 1) on harvesters (column 1, lines 10-12). It would have been obvious to one having ordinary skill in the art at the time of the invention to replace the signal combining circuit of Fardal with the relays as taught by Hofmann in order to provide a system having greater electro-mechanical advantage.

Although it is believed that the amendment to the claims renders the rejection moot, Applicant respectfully disagrees. Fardal shows and discloses a plurality of variable output sensors and potentiometers that feed signals whose outputs are fed into a signal combining circuit. Fardal's control system does not feature relays, as claimed. Fardal does feature the velocity or ground speed as a reference signal to operate his control system. Fardal does not show or disclose an alarm arrangement that is configured to be actuated when the signal from a sensor exceeds an upper threshold. And, Fardal does not show or disclose an audible indicator.

Hofmann shows and discloses an electronic circuit of an electromagnetic clutch that is used to disengage feed rollers of a harvesting machine and prevent damage from pieces of metal. In operation pieces of metal will be detected by a sensor, which energizes a relay that controls another relay, which controls current flow to an electromagnetic clutch. When metal is detected, the relays are actuated in a serial manner and the clutch is immediately disengaged and the machine stops.

Applicant notes that the methods of controlling an operating parameter of a grain harvester have not been addressed.

It is "well-established that before a conclusion of obviousness may be based on a combination of references, there must have been a reason, suggestion, or motivation to lead an inventor to combine those references."¹

Neither Fardal nor Hofmann show or disclose that signal combining circuits may be replaced by one or more relays. Neither Fardal nor Hofmann suggest that a signal combining circuit may be replaced by one or more relays. Moreover, Fardal does not need to increase the electro-mechanical advantage of his control system by adding

¹ Pro-Mold and Tool Co. v. Great Lakes Plastics, Inc., 37 USPQ2d 1626, 1629 (Fed. Cir. 1996).

relays; he need only replace his existing solenoids with larger solenoids. Moreover, Fardal is not interested in using his control system to immediately stop the operation of a harvester in response to the detection of metallic objects, as taught by Hofmann. In other words, it would not be obvious to replace the signal combining circuit of modify the reference of Fardal by providing it with relays as taught by Hofmann other than the Examiner's broad conclusory statement based on information flowing from Applicants disclosure.

It is well settled that "[c]ombining prior art references without evidence of ... a suggestion, teaching, or motivation simply takes the inventor's disclosures as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight"².

Applicant respectfully request that the rejection of claims 1-16 under the combined references of Fardal and Hofmann be withdrawn and the claims pass to issue, or in the alternative, reconsidered and/or further examined.

CONCLUSION

On the basis of the foregoing amendments, remarks, and arguments of record, applicant respectfully submits that claims 1-3, 5-10, and 12-16 are in condition for allowance and Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Alternatively, if the Examiner is of the opinion that prosecution of the application may be expedited by a telephonic interview, the Examiner is invited to contact applicant's representative at the telephone number listed below.

² In re. Dembiczak, 175F3d. 994, 50 USPQ2d. 1614

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Respectfully submitted,
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